# Unit 5 Lesson 3B | Classwork / Homework

Pick 5 sine / 5 cosine to graph using transformations. Analyze each graph and write an equation using the other function. Use your own paper.

## Sine

A. $y = 3\sin(2x - 180°)$

B. $y = \frac{1}{2}\sin(x + 90°)$

C. $y = -2\sin(2x + \frac{\pi}{2})$

D. $y = 3\sin(4x + 2\pi)$

E. $y = 4\sin(2x - \frac{2\pi}{3})$

F. $y = 3\sin(2x - \frac{\pi}{3})$

G. $y = 3\sin(\frac{\pi}{2}x + \pi)$

## Cosine

A. $y = \frac{1}{2}\cos(4x + \pi)$

B. $y = \frac{3}{2}\cos(2x + \pi)$

C. $y = 3\cos(2x - 180°)$

D. $y = -4\cos(2x - 90°)$

E. $y = 3\cos(2x - \frac{\pi}{3})$

F. $y = -3\cos(3x + 90°)$

G. $y = -\cos(\pi x + \frac{\pi}{2})$